

November 5, 1951

Dr. M. Doudoroff
Dept. Bacteriology
University of California
Berkeley 4, California

Dear Mike:

Not long after my last letter was posted, we received a note from Roger who had spoken to you over the phone. Along with Roger, Esther and I were very much heartened at your response to your loss. We don't have to tell you that we're behind you.

I hope the enclosed circular is what you're looking for. Your strains should be ok; Kees should have them also.

For class purposes, the experiment could possibly be simplified further, if each student is to handle it himself. It is not essential to use washed suspensions, although you get a somewhat heavier background. The parent cultures should be grown separately overnight in Pennassay broth. The merely plate about .1 ml of each parent, together, or separately for controls, on minimal agar. Or, growth scraped from a streak of growth on nutrient agar will also provide a reasonably good inoculum. There is nothing fastidious about the conditions for recombination, at all, so long as the cultures haven't been sitting around too long.

The Glu- certainly appears to be perplexing. I hope that there is a detailed discussion of your experiments in the P-metabolism paper; if not I shall expect to get the fullest details from you when you visit, which I am looking forward to. This is one case, anyhow, where you can't stand on permeability, unless you want to extend that concept to dried cells! Have you explicitly tested the utilization of phosphorylated glucose intermediates, not step by step, but for overall glycolysis?

We do have W-108, W-327 etc., or their equivalents, and will be glad to send anything out to you again that you might have any use for.

The lactose+ hexose- has pretty well flopped. Contrary to reactions on EMB agar, the lactose-grown cells (in a crude experiment) fermented glucose, lactose, galactose in that order. Probably it will boil down to (mal)adaptive specificities, along the ~~mutax~~ order of *P. putrefaciens* and maltose.

There's lots more to talk about, but will keep until we see you.

Sincerely,

a girl, Emily Woodworth Bailey, ever show up as a
er student (undergrad) from UW, or to look for a
used to assist in my research, and was a

JL

Joshua Lederberg